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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,312	08/03/2000	Brian D. Kruse	10201US01 (EKC 90052)	9288

1333 7590 11/16/2005

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EXAMINER

WOODS, ERIC V

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,312

Applicant(s)

KRUSE ET AL.

Examiner

Eric V. Woods

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14-37 and 39-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,14-32,39-52 and 59-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application for at least the following reasons:

1. The drawings have handwritten elements, which are illegible in many places and are not acceptable;
2. The drawings run over the margins of the pages, e.g. formal drawings must fit within the spacing of the page. See Figure 2, where the drawing elements almost run off the edge of the page, and Figure 3, in which the drawings clearly **do** run off the edge of the page (these are only examples, the other drawings have similar defects);
3. The boxes that form certain elements in the drawings are missing edges – note Figure 3, where the left hand side of the boxes of elements 40 and 42 for example are missing, and boxes 52 and 60 have faded left edges, and boxes 54 and 56 have faded right edges (this is only an example, other drawings suffer the same defects, as Figure 16, element 194);
4. There are fingerprint-like smudges on the drawings, see element 162 in Figure 11 as an example;
5. The text within boxes is not legible – see element 126 in Figure 2;
6. The labels on elements are not legible -- see elements 146, 140, and the like in Figure 2;
7. Some drawings appear skewed.

All of these defects must be corrected.

Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Response to Arguments

Applicant's arguments with respect to claims 1, 3-12, 14-37, and 39-63 have been considered but are moot in view of the new ground(s) of rejection, and additionally are not persuasive.

Applicant's arguments submitted 18 August 2005 are not found to be persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the question is simple. Examiner is not **combining** Holmes and Hilliard per se, but rather modifying Hilliard in light of the teachings of Holmes. As has been noted in the several previous Office Actions by the quantity of references cited, it is well known in the art that calibrating a monitor requires a characterization of the display device in various aspects,

including grey, white, and black balance, as well as characterizing the range of the display device and the like.

Now, Hilliard clearly teaches a network-based system where the client computer executes a process that guides the user through a color profiling process for the particular device. Now, firstly, as noted below, Hilliard distinctly teaches in [0042] and [0116] that gray scale correction is included herein, particularly for correcting a monitor. Note next that Hilliard clearly sets forth in [0182] that: "Setup screen 454 may include an array of patches or areas 456 and 458 either of gray or other display primary colors or color mixtures. Areas 456 and 458 may be closely spaced in the highlights and shadow areas of the I/o curve. The user is instructed to adjust the "brightness" and "contrast" or any display controls, to assure maximum or luminance difference between the areas." The purpose is to maximize the dynamic range of the monitor [0182].

In other words, Hilliard teaches in [0116] that "...implementation of the present invention can be initiated anytime a page element requiring accurate color or gray scale including a graphic, image, or video is present. Color or gray scale accuracy is identified here as high fidelity or identical rendition of a page element as compared to the image of the page element as viewed on the authoring display, or as an absolute within a color space." In [113]-[114], Hilliard clearly teaches that the system measures color metric states such as white point, black point, gamma, luminance, or "other suitable characteristic," which would clearly mean "gray balance", even though that is not expressly stated.

Further, Hilliard teaches that screen luminance could be measured by, "comparing the displayed luminance relative to some reference, such as a 'gray scale' or series of known areas of reflectance. For I/O curves of specific display color primaries, each primary color would be displayed instead of the neutral color", e.g. gray.

That being said, it is therefore obvious that Hilliard does in fact concern itself with measuring the gray scale characteristics of a display.

Next, applicant clearly states in pages 2-3 that one embodiment of their invention is to compare grey patches, which Hilliard clearly teaches in [0182].

Further, applicant has not defined the terms 'gray balance' anywhere in the specification, and so cannot claim to serve as his own lexicographer (*Process Control v. HydReclaim*). In the art, this term typically means checking the reproduced tone values of the gray scale with the original tone values, e.g. comparing patches of gray on a monitor screen. Another common definition is "the ability to reproduce the neutral gray of an original image as a perfect neutral gray by balancing the proportions of cyan, magenta, and yellow in a color separation." These are reasonable definitions; the examiner must by Office policy and court precedent (*In re Morris*) give claims their broadest reasonable interpretation in light of the intrinsic record (*Phillips v. AWH*), where dictionaries may be used to clarify unclear terms, **so long as the definition is consistent with the intrinsic record.**

Therefore, based at least upon the above definitions, Hilliard does in fact teach measuring the gray balance of a display device. However, this is never **expressly** stated.

The Holmes reference merely points out that measuring such characteristics is part of calibrating the display device. Now, the entire point of the Hilliard reference – and applicant's invention – is to allow users having **uncalibrated** displays to receive uniform reproduction of an original image, where this is done by altering the base image by processing to generate a desired output image with a color range and gamut consistent with the output device. Holmes teaches that certain elements are typically measured during the calibration process.

All that is accomplished with the Holmes reference is to clarify various parameters that it is desired to measure during such a "profiling" process. Applicant has already agreed with examiner that Hilliard teaches a "profiling" process, since applicant has not disputed this conclusion across five separate responses. The teachings of Holmes are relevant precisely because Hilliard must compensate images for each of the parameters that would typically be measured **and corrected** during a calibration process. Therefore, there is in fact substantial motivation to modify Hilliard in light of Holmes as maintained in the previous Office Action.

Therefore, applicant's arguments are inapposite.

Allowable Subject Matter

The indicated allowability of claims 8-12, 33-37, and 53-58 is withdrawn in view of the newly discovered reference(s) as below. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3-12 14-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilliard.

Regarding claim 1, Hilliard et al discloses that the claimed feature of a method comprising: obtaining information characterizing the color response of a display device associated with a client residing on a computer network by guiding the client through a color profiling process that profiles the color response of the display device, wherein the color profiling process includes estimating the gray balance ["gray scale correction"] of the display device (See [42], [116]); modifying a color image based on the information to improve the accuracy of the color image when displayed on the display device; and delivering the modified color image ["color corrected image"] to the client via the

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computer network for display on the display device. (See Abstract, Fig 1-8, Fig 20-21, [38]-[42], [61]-[62], [116]-[118], [126]-[128], [133]-[136])

Hilliard does not explicitly disclose that, "the color profiling process includes estimating the gray balance of the display device" in so many words (Although Hilliard et al mentioned that "gray scale correction" See line 11-13 in [42]). Examiner maintains that based on that alone, it would have been obvious to correct the grey balance.

Now, Hilliard clearly teaches a network-based system where the client computer executes a process that guides the user through a color profiling process for the particular device. Now, firstly, as noted below, Hilliard distinctly teaches in [0042] and [0116] that gray scale correction is included herein, particularly for correcting a monitor. Note next that Hilliard clearly sets forth in [0182] that: "Setup screen 454 may include an array of patches or areas 456 and 458 either of gray or other display primary colors or color mixtures. Areas 456 and 458 may be closely spaced in the highlights and shadow areas of the I/O curve. The user is instructed to adjust the "brightness" and "contrast" or any display controls, to assure maximum or luminance difference between the areas." The purpose is to maximize the dynamic range of the monitor [0182].

In other words, Hilliard teaches in [0116] that "...implementation of the present invention can be initiated anytime a page element requiring accurate color or gray scale including a graphic, image, or video is present. Color or gray scale accuracy is identified here as high fidelity or identical rendition of a page element as compared to the image of the page element as viewed on the authoring display, or as an absolute within a color space."

Further, Hilliard teaches that screen luminance could be measured by, "comparing the displayed luminance relative to some reference, such as a 'gray scale' or series of known areas of reflectance. For I/O curves of specific display color primaries, each primary color would be displayed instead of the neutral color", e.g. gray.

That being said, it is therefore obvious that Hilliard does in fact concern itself with measuring the gray scale characteristics of a display.

Next, applicant clearly states in pages 2-3 that one embodiment of their invention is to compare gray patches, which Hilliard clearly teaches in [0182].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hilliard to measure the gray balance of the display, since all other relevant characteristics, such as white point, black point, gamma, and luminance were being measured. Furthermore, examiner maintains and contends (if requested will provide references to this effect) that given the white point, black point, gamma, and luminance of a display, it would be trivially obvious to calculate the gray balance.

Regarding claim 3, Hilliard et al discloses that guiding the client through the color profiling process by delivering a series of instructional web pages to the client. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 4, Hilliard et al discloses that the color profiling process includes estimating a gamma for the color response of the display device. (See [113]-[114], [151]-[155], [174]; Clifton, Abstract, 2:35-3:30, and the like)

Regarding claim 5, Hilliard et al discloses that the color profiling process includes estimating a gamma for the color response of each of the red, green and blue color channels associated with the display device. (See [113]-[114], [151]-[155], [174]; Also See Abstract, 2:35-3:30, and the like in Clifton)

Regarding claim 14, Hilliard et al discloses that guiding the client through the color profiling process by delivering a series of instructional web pages to the client; obtaining the information by generating a web cookie based on results of the color profiling process; and transmitting the web cookie to a remote server in the computer network. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 15, Hilliard et al discloses that the remote server modifies the color image based on the information. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 16, Hilliard et al discloses that the remote server delivers the modified color image to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 17, Hilliard et al discloses that transmitting the information to a remote server in the computer network, the remote server modifying the color images based on the information. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 18, Hilliard et al discloses that transmitting the information to a plurality of remote servers in the computer network, and modifying a plurality of color images based on the information, wherein each of the remote servers modifies and delivers at least one of the color images to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 19, Hilliard et al discloses that obtaining the information by obtaining information characterizing the color responses of a plurality of display devices associated with a plurality of clients residing on the computer network. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 20, Hilliard et al discloses that the color image forms part of content received by the client from a remote server. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 21, Hilliard et al discloses that the computer network is the World Wide Web, and the color image forms part of a web page received by the client from a web server residing on the computer network. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 22, Hilliard et al discloses that the color image includes a plurality of color images stored on image servers residing on the computer network, and the color images form parts of web pages received by the client from web servers residing on the computer network, the image servers and web servers being distinct from one another. (See Fig 1, Fig 3, and Fig. 11)

Regarding claim 23, Hilliard et al discloses that modifying the color images before the delivery of the color images to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 24, Hilliard et al discloses that transmitting a web page from a web server to the client, wherein the web page includes an image tag identifying the color image on a color image server residing on the computer network; transmitting the

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information as part of a web cookie to the color image server, wherein the color image server modifies the color image based on the information; and transmitting the color image from the color image server to the client. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 25, Hilliard et al discloses that transmitting a first web page from a color profile server to the client, the web page guiding the client through a color profiling process to obtain the information; transmitting a second web page from a web server to the client, wherein the web page includes an image tag identifying the color image on a color image server residing on the network; transmitting the information as part of a web cookie to the color image server, wherein the color image server modifies the color image based on the information; and transmitting the color image from color image serve to the client. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 26, refer to the discussion for the claim 1 hereinabove, Hilliard et al discloses that the claimed feature of a system comprising: a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the color profiling process includes

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estimating the gray balance of the display device; and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device. (See Abstract, Fig 1-8, Fig 20-21, [38]-[42], [61]-[62], [116]-[118], [126]-[128], [133]-[136])

Regarding claim 27, Hilliard et al discloses that the one or more color correction modules include a plurality of color correction modules, each of the color correction modules being resident with one of the color image servers on the network. (See Abstract, Fig 1-8, Fig 20-21)

Regarding claims 28-30, claims 28-30 are similar in scope to the claims 3-5, and thus the rejections to claims 3-5 hereinabove are also applicable to claims 28-30.

Regarding claims 39-43, claims 39-43 are similar in scope to the claims 14-17, 21 and 27, and thus the rejections to claims 14-17, 21 and 27 hereinabove are also applicable to claims 39-43.

Regarding claim 44, claim 44 is similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claim 44.

Regarding claim 45, Hilliard et al discloses that obtaining the information by guiding the client through a color profiling process that profiles the color response of the display device, the color profiling process including delivery of a series of interactive, instructional pages to the client, wherein completion of the color profiling process requires no more than four clicks with a pointing device operated by a user associated with the client. (See [42], [210])

Regarding claim 46, Hilliard et al discloses that the cookie includes a profiler cookie written to the client by a first server that obtains the information, and a subscriber cookie written to the client by a color image server that delivers the modified color image. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 47, Hilliard et al discloses that transferring at least some of the contents of the profiler cookie to the color image server, whereby the color image server writes the subscriber cookie to the client, the subscriber cookie being thereafter transferred to the color image server when the client requests delivery of images from the color image server. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claims 48-52, claims 48-52 are similar in scope to the claims 26,32 and 45-47, and thus the rejections to claims 26,32 and 45-47 hereinabove are also applicable to claims 48-52.

Regarding claim 59, Hilliard et al discloses that using the coarse gamma as a starting point for estimating the fine gamma, and using the fine gamma as a starting point for estimating the gray balance. (See [113]-[114], [151]-[155], [186]-[187])

Regarding claims 60 and 62, claims 60 and 62 are similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claims 60 and 62.

Regarding claim 61, Hilliard et al discloses that the program code is contained both in physical data storage media and signals transmitted between the client computer and other resource on the computer network. (See Fig 1, Fig 3-5, and Fig. 11)

Regarding claim 63, claim 63 is similar in scope to the claim 61, and thus the rejection to claim 61 hereinabove is also applicable to claim 63.

Claims 1 and 3-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilliard in view of Clifton et al (US 6,388,648 B1).

Regarding claim 1, Hilliard et al discloses that the claimed feature of a method comprising: obtaining information characterizing the color response of a display device associated with a client residing on a computer network by guiding the client through a color profiling process that profiles the color response of the display device, wherein the color profiling process includes estimating the gray balance ["gray scale correction"] of the display device (See [42], [116]); modifying a color image based on the information to improve the accuracy of the color image when displayed on the display device; and delivering the modified color image ["color corrected image"] to the client via the computer network for display on the display device. (See Abstract, Fig 1-8, Fig 20-21, [38]-[42], [61]-[62], [116]-[118], [126]-[128], [133]-[136])

Hilliard does not explicitly disclose that "the color profiling process includes estimating the gray balance of the display device." (Although Hilliard et al mentioned that "gray scale correction" See line 11-13 in [42]). Examiner maintains that based on that alone, it would have been obvious to correct the grey balance.

Now, Hilliard clearly teaches a network-based system where the client computer executes a process that guides the user through a color profiling process for the particular device. Now, firstly, as noted below, Hilliard distinctly teaches in [0042] and

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[0116] that gray scale correction is included herein, particularly for correcting a monitor.

Note next that Hilliard clearly sets forth in [0182] that: "Setup screen 454 may include an array of patches or areas 456 and 458 either of gray or other display primary colors or color mixtures. Areas 456 and 458 may be closely spaced in the highlights and shadow areas of the I/O curve. The user is instructed to adjust the "brightness" and "contrast" or any display controls, to assure maximum or luminance difference between the areas." The purpose is to maximize the dynamic range of the monitor [0182].

In other words, Hilliard teaches in [0116] that "...implementation of the present invention can be initiated anytime a page element requiring accurate color or gray scale including a graphic, image, or video is present. Color or gray scale accuracy is identified here as high fidelity or identical rendition of a page element as compared to the image of the page element as viewed on the authoring display, or as an absolute within a color space."

Further, Hilliard teaches that screen luminance could be measured by, "comparing the displayed luminance relative to some reference, such as a 'gray scale' or series of known areas of reflectance. For I/O curves of specific display color primaries, each primary color would be displayed instead of the neutral color", e.g. gray.

That being said, it is therefore obvious that Hilliard does in fact concern itself with measuring the gray scale characteristics of a display.

Next, applicant clearly states in pages 2-3 that one embodiment of their invention is to compare grey patches, which Hilliard clearly teaches in [0182].

The Clifton reference clearly discloses determining the grey balance of a display device (11:52-67), where the gray balance is measured by internal sensors (8:5-16) in the display device, which techniques can be applied to any display (11:30-35), see also Abstract.

Clifton teaches a multi-display array, where each display must have its characteristics measured, and that the base image is processed for each display (8:28-67) and modified as required so that the entire array of displays shows the same color range for an image, even though the individual displays all have varying display characteristics, and their display properties (e.g. gamma values, white and grey balance, and the like) will change over time (5:5-20).

That being said, the end result of Clifton – regardless of whether or not it requires calibration – teaches modifying a base image so that it will be reliably reproduced by an output display device, which renders it analogous art and directed to the same problem solving area as Hilliard.

The Clifton reference merely points out that measuring such characteristics is part of calibrating the display device. Now, the entire point of the Hilliard reference – and applicant's invention – is to allow users having **uncalibrated** displays to receive uniform reproduction of an original image, where this is done by altering the base image by processing to generate a desired output image with a color range and gamut consistent with the output device. Clifton teaches that certain elements are typically measured during the calibration process, and compensated for thereafter. Clifton further teaches that such characteristics may merely be measured to compensate a

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display. Note Clifton 10:5-15, where the display devices communicate between each other and automatically achieve a common color balance and luminance between the various look-up tables on the display devices. This is analogous to applicant's invention of modifying the base image so that it is displayed correctly on the output device.

All that is accomplished with the Clifton reference is to clarify various parameters that it is desired to measure during such a "profiling" process. Applicant has already agreed with examiner that Hilliard teaches a "profiling" process, since applicant has not disputed this conclusion across five separate responses. The teachings of Clifton are relevant precisely because Hilliard must compensate images for each of the parameters that would typically be measured **and corrected** during a calibration process.

Therefore, there is in fact substantial motivation to modify Hilliard in light of Holmes as maintained in the previous Office Action. Also, as noted above, Hilliard strongly suggests (if not directly teaches) the gray balance limitation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hilliard in light of the teachings of Clifton to measure and to compensate for the gray balance of the display.

Regarding claim 3, Hilliard et al discloses that guiding the client through the color profiling process by delivering a series of instructional web pages to the client. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 4, Hilliard et al discloses that the color profiling process includes estimating a gamma for the color response of the display device. (See [113]-[114], [151]-[155], [174]; Clifton, Abstract, 2:35-3:30, and the like)

Regarding claim 5, Hilliard et al discloses that the color profiling process includes estimating a gamma for the color response of each of the red, green and blue color channels associated with the display device. (See [113]-[114], [151]-[155], [174]; Also See Abstract, 2:35-3:30, and the like in Clifton)

Regarding claim 8, Hilliard et al further discloses that estimating the black point of the display device includes: displaying a first range of gray elements on the display device; setting the contrast of the display device to maximum; setting the brightness of the display device to maximum; reducing the brightness of the display device until the darkest of the gray elements is barely visible; selecting the gray element that is barely visible. (See [165], [181]-[186])

Regarding claims 9-12, Hilliard et al discloses similar feature. (See [186]-[187])
[“one possibility is to display three, 25%, 50% and 75% halftone screens for each of the display colors, red, green, and blue with a number of continuous tone areas immersed in the halftone background”]

Regarding claim 14, Hilliard et al discloses that guiding the client through the color profiling process by delivering a series of instructional web pages to the client; obtaining the information by generating a web cookie based on results of the color profiling process; and transmitting the web cookie to a remote server in the computer network. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 15, Hilliard et al discloses that the remote server modifies the color image based on the information. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 16, Hilliard et al discloses that the remote server delivers the modified color image to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 17, Hilliard et al discloses that transmitting the information to a remote server in the computer network, the remote server modifying the color images based on the information. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 18, Hilliard et al discloses that transmitting the information to a plurality of remote servers in the computer network, and modifying a plurality of color images based on the information, wherein each of the remote servers modifies and delivers at least one of the color images to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 19, Hilliard et al discloses that obtaining the information by obtaining information characterizing the color responses of a plurality of display devices associated with a plurality of clients residing on the computer network. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 20, Hilliard et al discloses that the color image forms part of content received by the client from a remote server. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 21, Hilliard et al discloses that the computer network is the World Wide Web, and the color image forms part of a web page received by the client from a web server residing on the computer network. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 22, Hilliard et al discloses that the color image includes a plurality of color images stored on image servers residing on the computer network, and the color images form parts of web pages received by the client from web servers residing on the computer network, the image servers and web servers being distinct from one another. (See Fig 1, Fig 3, and Fig. 11)

Regarding claim 23, Hilliard et al discloses that modifying the color images before the delivery of the color images to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 24, Hilliard et al discloses that transmitting a web page from a web server to the client, wherein the web page includes an image tag identifying the color image on a color image server residing on the computer network; transmitting the information as part of a web cookie to the color image server, wherein the color image server modifies the color image based on the information; and transmitting the color image from the color image server to the client. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 25, Hilliard et al discloses that transmitting a first web page from a color profile server to the client, the web page guiding the client through a color profiling process to obtain the information; transmitting a second web page from a web server to the client, wherein the web page includes an image tag identifying the color image on a color image server residing on the network; transmitting the information as part of a web cookie to the color image server, wherein the color image server modifies the color image based on the information; and transmitting the color image from color

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image serve to the client. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 26, refer to the discussion for the claim 1 hereinabove, Hilliard et al discloses that the claimed feature of a system comprising: a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the color profiling process includes estimating the gray balance of the display device; and one or more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device. (See Abstract, Fig 1-8, Fig 20-21, [38]-[42], [61]-[62], [116]-[118], [126]-[128], [133]-[136])

Regarding claim 27, Hilliard et al discloses that the one or more color correction modules include a plurality of color correction modules, each of the color correction modules being resident with one of the color image servers on the network. (See Abstract, Fig 1-8, Fig 20-21)

Regarding claims 28-32, claims 28-32 are similar in scope to the claims 3-7, and thus the rejections to claims 3-7 hereinabove are also applicable to claims 28-32.

Regarding claims 39-43, claims 39-43 are similar in scope to the claims 14-17, 21 and 27, and thus the rejections to claims 14-17, 21 and 27 hereinabove are also applicable to claims 39-43.

Regarding claim 44, claim 44 is similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claim 44.

Regarding claim 45, Hilliard et al discloses that obtaining the information by guiding the client through a color profiling process that profiles the color response of the display device, the color profiling process including delivery of a series of interactive, instructional pages to the client, wherein completion of the color profiling process requires no more than four clicks with a pointing device operated by a user associated with the client. (See [42], [210])

Regarding claim 46, Hilliard et al discloses that the cookie includes a profiler cookie written to the client by a first server that obtains the information, and a subscriber cookie written to the client by a color image server that delivers the modified color image. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 47, Hilliard et al discloses that transferring at least some of the contents of the profiler cookie to the color image server, whereby the color image server writes the subscriber cookie to the client, the subscriber cookie being thereafter transferred to the color image server when the client requests delivery of images from the color image server. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claims 48-52, claims 48-52 are similar in scope to the claims 26,32 and 45-47, and thus the rejections to claims 26,32 and 45-47 hereinabove are also applicable to claims 48-52.

Regarding claim 59, Hilliard et al discloses that using the coarse gamma as a starting point for estimating the fine gamma, and using the fine gamma as a starting point for estimating the gray balance. (See [113]-[114], [151]-[155], [186]-[187])

Regarding claims 60 and 62, claims 60 and 62 are similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claims 60 and 62.

Regarding claim 61, Hilliard et al discloses that the program code is contained both in physical data storage media and signals transmitted between the client computer and other resource on the computer network. (See Fig 1, Fig 3-5, and Fig. 11)

Regarding claim 63, claim 63 is similar in scope to the claim 61, and thus the rejection to claim 61 hereinabove is also applicable to claim 63.

Claims 6-12 are rejected under 35 U.S.C. 103(a) as unpatentable over Hilliard in view of Clifton as applied to claim 1, and further in view of Holmes.

Regarding claims 6-7, Hilliard et al discloses that the color profiling process includes: estimating the black point of the display device; estimating a coarse gamma for the display device; estimating a fine gamma for the display device based in part on the coarse gamma; and generating a color profile based on the black point, the coarse gamma, the fine gamma, and the gray balance. (See [113]-[114], [151]-[155]) Although Hilliard et al does not discloses two groups of gamma [i.e. the coarse gamma, the fine

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gamma] for the display device, in an analogous art, separating the gamma or any other color parameters into two different groups based on the level of accuracy [i.e. coarse, fine], thereby having higher or fine color parameters [i.e. gamma] is well known in the art to one of ordinary skilled in the art, in order to provide more ensured output images to user. [i.e. 'method one and method two' in Holmes (6,686,953), which provided in the newly cited reference herewith]).

Motivation for the combination of Hilliard and Clifton is found in claim 1, and for modification in view of Holmes is as stated above, in that it results in more accurate gamma correction, and also such limitation ['color correcting/profiling process includes the step of estimating grey balance of an image'] is inherently shown in the teaching of Holmes. [i.e. 'the provided visual target and sub-targets in gray balance methods to sense, control and verify the correct gray balance of the entire tone scale of the display', as gray balance for the display device can be estimated by selecting one of these target and sub-targets, and/or the step of estimating gray balance is necessarily required to construct these visual target and sub-targets] (See Abstract, steps 400-500 in Fig 7, step 1460 in Fig 8, 'target and sub-targets' in Fig 9-12 and 23, col. 5 line 14-67, col. 6 line 15-35, col. 14 line 65-col. 15 line 22, col. 19 line 23-54, col. 20 line 17-26) It would have been obvious to one skilled in the art to incorporate the teaching of Holmes into the teaching of Hilliard et al, in order to provide increased precision of gray balance without complicated manner of user's control of gray balance adjustment, thereby effectively achieving desired/corrected output color rendition with the imaging device, as such improvement [i.e. color correcting/profiling process using of the estimated gray

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balance] is also advantageously desirable in the teaching of Hilliard et al for providing properly/accurately corrected elements [i.e. gamma, gray] of colored images in the displaying device with easy manner. (See [42], [113], [154], [155] in Hilliard et al).

Regarding claims 8-11,

Regarding claim 8, Hilliard et al further discloses that estimating the black point of the display device includes: displaying a first range of gray elements on the display device; setting the contrast of the display device to maximum; setting the brightness of the display device to maximum; reducing the brightness of the display device until the darkest of the gray elements is barely visible; selecting the gray element that is barely visible. (See [165], [181]-[186])

Regarding claims 9-12, Hilliard et al discloses similar feature. (See [186]-[187])
[“one possibility is to display three, 25%, 50% and 75% halftone screens for each of the display colors, red, green, and blue with a number of continuous tone areas immersed in the halftone background”]

Regarding claims 31-32, claims 31-32 are similar in scope to the claims 6-7, and thus the rejections to claims 6-7 hereinabove are also applicable to claims 31-32.

Regarding claims 33-37, these are like unto claims 8-12, and the same grounds of rejection are applied to them.

Regarding claims 52-56, claims 52-56 are similar in scope to the claims 7-11, and thus the rejections to claims 7-11 hereinabove are also applicable to claims 52-56.

Regarding claims 57-58, Hilliard et al discloses that the fourth/third range of gray elements is represented centrally within as a two-dimensional array of the gray elements. (See [113]-[114], [151]-[155])

Regarding claim 59, Hilliard et al discloses that using the coarse gamma as a starting point for estimating the fine gamma, and using the fine gamma as a starting point for estimating the gray balance. (See [113]-[114], [151]-[155], [186]-[187])

Claims 1,3-12,14-32,39-52 and 59-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilliard et al (USPAP, US 2002/0080168) in view of Holmes (6,686,953).

Regarding claim 1, Hilliard et al discloses that the claimed feature of a method comprising: obtaining information ["the color display characteristic of display"] characterizing the color response of a display device associated with a client residing on a computer network by guiding the client through a color profiling process that profiles the color response of the display device, wherein the color profiling process includes [estimating the gray balance of the display device] (See Fig 3A-3B, [41-42], [84-109]); modifying a color image based on the information to improve the accuracy of the color image when displayed on the display device; and delivering the modified color image ["color corrected image"] to the client via the computer network for display on the display device. (See Abstract, Fig 1-8, Fig 20-21, [38]-[42], [61]-[62], [116]-[118], [126]-[128], [133]-[136])

Hilliard et al does not explicitly disclose, "The color profiling process includes estimating the gray balance of the display device." However, such limitation ['color correcting/profiling process includes the step of estimating grey balance of an image'] is inherently shown in the teaching of Holmes. [i.e. 'the provided visual target and sub-targets in gray balance methods to sense, control and verify the correct gray balance of the entire tone scale of the display', as gray balance for the display device can be estimated by selecting one of these target and sub-targets, and/or the step of estimating gray balance is necessarily required to construct these visual target and sub-targets] (See Abstract, steps 400-500 in Fig 7, step 1460 in Fig 8, 'target and sub-targets' in Fig 9-12 and 23, col. 5 line 14-67, col. 6 line 15-35, col. 14 line 65-col. 15 line 22, col. 19 line 23-54, col. 20 line 17-26) It would have been obvious to one skilled in the art to incorporate the teaching of Holmes into the teaching of Hilliard et al, in order to provide increased precision of gray balance without complicated manner of user's control of gray balance adjustment, thereby effectively achieving desired/corrected output color rendition with the imaging device, as such improvement [i.e. color correcting/profiling process using of the estimated gray balance] is also advantageously desirable in the teaching of Hilliard et al for providing properly/accurately corrected elements [i.e. gamma, gray] of colored images in the displaying device with easy manner. (See [42], [113], [154], [155] in Hilliard et al)

Now, Hilliard clearly teaches a network-based system where the client computer executes a process that guides the user through a color profiling process for the particular device. Now, firstly, as noted below, Hilliard distinctly teaches in [0042] and

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[0116] that gray scale correction is included herein, particularly for correcting a monitor.

Note next that Hilliard clearly sets forth in [0182] that: "Setup screen 454 may include an array of patches or areas 456 and 458 either of gray or other display primary colors or color mixtures. Areas 456 and 458 may be closely spaced in the highlights and shadow areas of the I/o curve. The user is instructed to adjust the "brightness" and "contrast" or any display controls, to assure maximum or luminance difference between the areas." The purpose is to maximize the dynamic range of the monitor [0182].

In other words, Hilliard teaches in [0116] that "...implementation of the present invention can be initiated anytime a page element requiring accurate color or gray scale including a graphic, image, or video is present. Color or gray scale accuracy is identified here as high fidelity or identical rendition of a page element as compared to the image of the page element as viewed on the authoring display, or as an absolute within a color space."

Further, Hilliard teaches that screen luminance could be measured by, "comparing the displayed luminance relative to some reference, such as a 'gray scale' or series of known areas of reflectance. For I/O curves of specific display color primaries, each primary color would be displayed instead of the neutral color", e.g. gray.

That being said, it is therefore obvious that Hilliard does in fact concern itself with measuring the gray scale characteristics of a display.

Next, applicant clearly states in pages 2-3 that one embodiment of their invention is to compare grey patches, which Hilliard clearly teaches in [0182]. See the section

above concerning "Response to Arguments", which is incorporated by reference for the relevant portions.

Regarding claim 3, Hilliard et al discloses that guiding the client through the color profiling process by delivering a series of instructional web pages to the client. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 4, Hilliard et al discloses that the color profiling process includes estimating a gamma for the color response of the display device. (See [113]-[114], [151]-[155], [174]; See Abstract, steps 400-500 in Fig 7, step 1460 in Fig 8, 'target and sub-targets' in Fig 9-12 and 23, col. 5 line 14-67, col. 6 line 15-35, col. 14 line 65-col 15 line 22, col. 19 line 23-54, col. 20 line 17-26 in Holmes)

Regarding claim 5, Hilliard et al discloses that the color profiling process includes estimating a gamma for the color response of each of the red, green and blue color channels associated with the display device. (See [113]-[114], [151]-[155], [174]; Also See Abstract, steps 400-500 in Fig 7, step 1460 in Fig 8, 'target and sub-targets' in Fig 9-12 and 23, col. 5 line 14-67, col. 6 line 15-35, col. 14 line 65-col 15 line 22, col. 19 line 23-54, col. 20 line 17-26 in Holmes)

Regarding claims 6-7, Hilliard et al discloses that the color profiling process includes: estimating the black point of the display device; estimating a coarse gamma for the display device; estimating a fine gamma for the display device based in part on the coarse gamma; and generating a color profile based on the black point, the coarse gamma, the fine gamma, and the gray balance. (See [113]-[114], [151]-[155]) Although

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Hilliard et al does not disclose two groups of gamma [i.e. the coarse gamma, the fine gamma] for the display device, in an analogous art, separating the gamma or any other color parameters into two different groups based on the level of accuracy [i.e. coarse, fine], thereby having higher or fine color parameters [i.e. gamma] is well known in the art to one of ordinary skilled in the art, in order to provide more ensured output images to user. [i.e. 'method one and method two' in Holmes (6,686,953), which provided in the newly cited reference herewith]

Regarding claim 8, Hilliard et al further discloses that estimating the black point of the display device includes: displaying a first range of gray elements on the display device; setting the contrast of the display device to maximum; setting the brightness of the display device to maximum; reducing the brightness of the display device until the darkest of the gray elements is barely visible; selecting the gray element that is barely visible. (See [165], [181]-[186])

Regarding claims 9-12, Hilliard et al discloses similar feature. (See [186]-[187])
[“one possibility is to display three, 25%, 50% and 75% halftone screens for each of the display colors, red, green, and blue with a number of continuous tone areas immersed in the halftone background”]

Regarding claim 14, Hilliard et al discloses that guiding the client through the color profiling process by delivering a series of instructional web pages to the client; obtaining the information by generating a web cookie based on results of the color profiling process; and transmitting the web cookie to a remote server in the computer network. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 15, Hilliard et al discloses that the remote server modifies the color image based on the information. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 16, Hilliard et al discloses that the remote server delivers the modified color image to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 17, Hilliard et al discloses that transmitting the information to a remote server in the computer network, the remote server modifying the color images based on the information. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 18, Hilliard et al discloses that transmitting the information to a plurality of remote servers in the computer network, and modifying a plurality of color images based on the information, wherein each of the remote servers modifies and delivers at least one of the color images to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 19, Hilliard et al discloses that obtaining the information by obtaining information characterizing the color responses of a plurality of display devices associated with a plurality of clients residing on the computer network. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 20, Hilliard et al discloses that the color image forms part of content received by the client from a remote server. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 21, Hilliard et al discloses that the computer network is the World Wide Web, and the color image forms part of a web page received by the client

from a web server residing on the computer network. (See [117]-[118], [125]-[128], [133], [136])

Regarding claim 22, Hilliard et al discloses that the color image includes a plurality of color images stored on image servers residing on the computer network, and the color images form parts of web pages received by the client from web servers residing on the computer network, the image servers and web servers being distinct from one another. (See Fig 1, Fig 3, and Fig. 11)

Regarding claim 23, Hilliard et al discloses that modifying the color images before the delivery of the color images to the client. (See [34], [39], [53], [61]-[65], [128]-[136])

Regarding claim 24, Hilliard et al discloses that transmitting a web page from a web server to the client, wherein the web page includes an image tag identifying the color image on a color image server residing on the computer network; transmitting the information as part of a web cookie to the color image server, wherein the color image server modifies the color image based on the information; and transmitting the color image from the color image server to the client. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 25, Hilliard et al discloses that transmitting a first web page from a color profile server to the client, the web page guiding the client through a color profiling process to obtain the information; transmitting a second web page from a web server to the client, wherein the web page includes an image tag identifying the color image on a color image server residing on the network; transmitting the information as

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part of a web cookie to the color image server, wherein the color image server modifies the color image based on the information; and transmitting the color image from color image serve to the client. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 26, refer to the discussion for the claim 1 hereinabove, Hilliard et al discloses that the claimed feature of a system comprising: a web server residing on a computer network, the web server transmitting web pages to remote clients residing on the computer network; a color image server residing on the computer network, the color image server transmitting color images referenced by the web pages to the clients for display on display devices associated with the clients; a color profile server residing on the computer network, the color profile server guiding the clients through a color profiling process to obtain information characterizing the color responses of the display devices associated with the clients, wherein the color profiling process includes estimating the gray balance of the display device; and one ore more color correction modules that modify the color images transmitted by the color image server based on the information to improve the accuracy of the color images when displayed on the respective display device. (See Abstract, Fig 1-8, Fig 20-21, [38]-[42], [61]-[62], [116]-[118], [126]-[128], [133]-[136])

Regarding claim 27, Hilliard et al discloses that the one or more color correction modules include a plurality of color correction modules, each of the color correction modules being resident with one of the color image servers on the network. (See Abstract, Fig 1-8, Fig 20-21)

Regarding claims 28-32, claims 28-32 are similar in scope to the claims 3-7, and thus the rejections to claims 3-7 hereinabove are also applicable to claims 28-32.

Regarding claims 28-37, claims 28-37 are similar in scope to the claims 3-12, and thus the rejections to claims 3-12 hereinabove are also applicable to claims 28-37.

Regarding claims 39-43, claims 39-43 are similar in scope to the claims 14-17, 21 and 27, and thus the rejections to claims 14-17, 21 and 27 hereinabove are also applicable to claims 39-43.

Regarding claim 44, claim 44 is similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claim 44.

Regarding claim 45, Hilliard et al discloses that obtaining the information by guiding the client through a color profiling process that profiles the color response of the display device, the color profiling process including delivery of a series of interactive, instructional pages to the client, wherein completion of the color profiling process requires no more than four clicks with a pointing device operated by a user associated with the client. (See [42], [210])

Regarding claim 46, Hilliard et al discloses that the cookie includes a profiler cookie written to the client by a first server that obtains the information, and a subscriber cookie written to the client by a color image server that delivers the modified color image. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claim 47, Hilliard et al discloses that transferring at least some of the contents of the profiler cookie to the color image server, whereby the color image server writes the subscriber cookie to the client, the subscriber cookie being thereafter

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transferred to the color image server when the client requests delivery of images from the color image server. (See [53]-[56], [64]-[65], [73], [117]-[118], [125]-[128], [133], [136])

Regarding claims 48-52, claims 48-52 are similar in scope to the claims 26,32 and 45-47, and thus the rejections to claims 26,32 and 45-47 hereinabove are also applicable to claims 48-52.

Regarding claims 52-56, claims 52-56 are similar in scope to the claims 7-11, and thus the rejections to claims 7-11 hereinabove are also applicable to claims 52-56.

Regarding claims 57-58, Hilliard et al discloses that the fourth/third range of gray elements is represented centrally within as a two-dimensional array of the gray elements. (See [113]-[114], [151]-[155])

Regarding claim 59, Hilliard et al discloses that using the coarse gamma as a starting point for estimating the fine gamma, and using the fine gamma as a starting point for estimating the gray balance. (See [113]-[114], [151]-[155], [186]-[187])

Regarding claims 60 and 62, claims 60 and 62 are similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claims 60 and 62.

Regarding claim 61, Hilliard et al discloses that the program code is contained both in physical data storage media and signals transmitted between the client computer and other resource on the computer network. (See Fig 1, Fig 3-5, and Fig. 11)

Regarding claim 63, claim 63 is similar in scope to the claim 61, and thus the rejection to claim 61 hereinabove is also applicable to claim 63.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric V. Woods whose telephone number is 571-272-7775. The examiner can normally be reached on M-F 7:30-4:30 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Eric Woods

November 7, 2005



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